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A method for selecting copied disks of the present invention comprises a determination step, a copying step and a storage control step.

The determination step determines whether or not the number of storage racks exceeds the number of a plurality of disks into which information stored in one copying source disk are copied. The copying step copies the information stored in the copying source disk into each of the disks in order and determines whether or not the copying process is normal, when it is determined that the number of the storage racks exceeds the number of the plurality of disks. The storage control step controls the disks so as to store the disks from the storage racks of one side in order when the copying process is normal, and controls the disks so as to store the disks from the storage racks of other side in order when the copying process is not normal.

The present invention may also include the following additional processes.

The number of the storage racks is one more than the number of the plurality of disks. Further, the method for selecting copied disks comprises a driving step for driving each of the disks, the copying source disks and the copying unit by drive unit and a disk moving step for moving each of the disks to the drive unit in order when each of the disks is copied, and moving each of the disks to the storage racks of the edge side corresponding to the control signal indicating one of normality and abnormality of the copying process after each of the disks is copied.

The storage control step controls the disks so as to take out the disks from the one side of the storage racks as next disks to be copied and processed when the copying process is normal, and controls the disks so as to take out the disks from the other side of the storage rack as the next disks to be copied when the copying process is not normal.

Further, the method for selecting copied disks comprises a counting step for counting the total number of copied disks and the number of error disks where the copying process is not normal, a determination step for determining whether or not the number of the counted error disks exceeds a predetermined number and an alarm step for sounding an alarm when the number of error disks exceeds the predetermined number.

The predetermined number of error disks is half of the total of the copied disks. Further, the method for selecting copied disks is provided with a display step for displaying the number of error disks where the copying process is not normal on the screen.

The display step displays a plurality of storage rack screens corresponding to the number of storage racks on the screen after the copying process of each disk was completed, and identifies and displays more than one storage rack screen corresponding to the difference number of the number of storage racks and the number of the plurality of disks for the storage rack screens corresponding to the number of error disks and the storage rack screens corresponding to the number of normal disks existing on both sides of the more than one storage rack screens.

The storage control step controls the disks so as to store the disks in a predetermined position when the copying process is normal, and controls the disks so as to store the disks in a position where a predetermined volume is shifted from the predetermined position of the storage racks when the copying process is not normal.

Further, the library device of the present invention comprises storage racks for storing a plurality of disks, a copying unit for copying information into each of the disks, a drive unit for driving each of the disks and the copying unit and moving means for moving the disks between the drive unit and the storage racks.

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unit for driving each of the disks and the copying unit and moving means for moving the disks between the drive unit and the storage racks.

A method for producing a duplicated disk includes the three steps of providing a library apparatus, inserting the master disk into the reproducing unit, and controlling the library apparatus to produce a duplicated disk. The library apparatus includes a plurality of storage cells each of which stores a disk being recordable with information, a reproducing unit which reproduces master information stored in a master disk, a writing unit which writes the master information into the recordable disk, and an accessor which moves the recordable disk being recordable between one of the plurality of storage cells and the writing unit.

According to the present invention, first of all, the first determination unit determines whether or not the number of storage racks exceeds the number of disks. The copying unit copies the information stored in the copying source disk into each of the disks in order and determines whether or not the copying process is normal, when it is determined by the first determination unit that the number of the storage racks exceeds the number of the plurality of disks. Further, the storage control unit controls the disks so as to store the disks from one side of the storage racks in order, when the copying process is normal.

On the other hand, the storage control unit controls the disks so as to store the disks from other side of the storage racks in order when the copying process is not normal.

Namely, vacant storage racks are generated between the normal disks stored from one side of the storage racks and the error disks stored from other side, since the number of the plurality of copied disks is less than the number of the storage racks. Accordingly, an operator can easily discriminate between the normal disks and the error disks by identifying the vacant storage rack.

In addition, it will be possible to use a plurality of storage racks efficiently, if the number of the storage racks is set so that it will be one more than the number of the plurality of disks.

It is possible to store the disks by discriminating the normal disk from the error disks, since the disks moving unit moves each of the disks to the drive unit in order when each of the disks is copied, and moves each of the disks to the side of the storage rack corresponding to the control signal outputted from the storage control unit after the disk is copied.

Besides, the storage control unit controls the disks so as to take out the disks from the one side of the storage racks as the next disk to be copied and processed when the copying process is normal, and controls the disks so as to take out the disks from the other side of the storage racks when the copying process is not normal. In particular, when the number of storage racks is set so that it will be one more than the number the disks, the disks may all be stored in the storage rack, even if error disks are generated continuously.

The number of error disks whose copying process was not normal is counted, and it is determined whether or not the number of error disks counted exceeds the predetermined number. The operator can easily recognize that there are too many error disks, since an alarm is sounded when the number of error disks exceeds the predetermined number.

Moreover, it can be easily understood that the number of error disks exceeds the number of normal disks, when the predetermined number is half of the number of the copied disks and the number of the error disks exceeds the predetermined number.